

## FROM THE ACC

## President's Page: Disparities in Cardiovascular Care

### Finding Ways to Narrow the Gap

*"Knowing is not enough; we must apply. Willing is not enough; we must do."*

—Johann Wolfgang von Goethe (1)

In 1999, a report in the *New England Journal of Medicine* titled "Effect of Race and Sex on Physicians' Recommendations for Cardiac Catheterization" (2) sent shock waves through the medical community and the lay press. Although the study remains controversial on both methodological and statistical grounds, its authors concluded that black women were 60% less likely to receive appropriate cardiac catheterization for angina than a white male reference group, despite giving the same cardiac and risk-factor histories to groups of primary care and family practice physicians attending their respective annual scientific meetings.

Since that publication, despite a decade of government reports and reforms, initiatives of medical societies, and focus by researchers and policy makers on the unequal health outcomes of minorities and women, health disparities have persisted in the United States.

#### The Facts

Studies continue to demonstrate lower than expected rates of diagnostic testing and poorer cardiovascular outcomes with treatment of women relative to men. The American College of Cardiology (ACC) is addressing this issue through continuous efforts specifically designed to aide the treatment of heart disease in women. However, recent advances in understanding differences in pathophysiology and closing treatment gaps in some studies are mitigated by studies indicating that large commercial plans demonstrate a disparity of  $\geq 5\%$  in favor of men for control of risk factors. This is estimated to result in 5,000 to 10,000 excess deaths in women annually (3).

Cardiovascular diseases, including hypertension, heart disease, and stroke, remain leading causes of death in the United States. Each of these has higher prevalence, morbidity, and mortality in African Americans (4). Over the past 40 years, great strides have been made in cardiovascular diagnosis, therapy, and access to care, resulting in decreased mortality from these diseases. African Americans, particularly men, in the United States improved the most over the past decade, with a 22% reduction in mortality (5,6), compared with only an 11% reduction in white women (Fig. 1). However, this has only slightly narrowed a very wide gap: the overall life expectancy of white women is 81 years but only 72 years for African American men.

#### The Basis

The reasons underlying these dramatic disparities in the incidence, prevalence, and mortality of cardiovascular diseases have been widely debated. In addition to higher frequencies of hypertension, diabetes mellitus, cigarette smoking, obesity, and physical inactivity in African Americans than in whites (4), there are non-disease-related factors that fall into 3 major categories: genetic differences, individual behaviors (lifestyles), and social (environmental)



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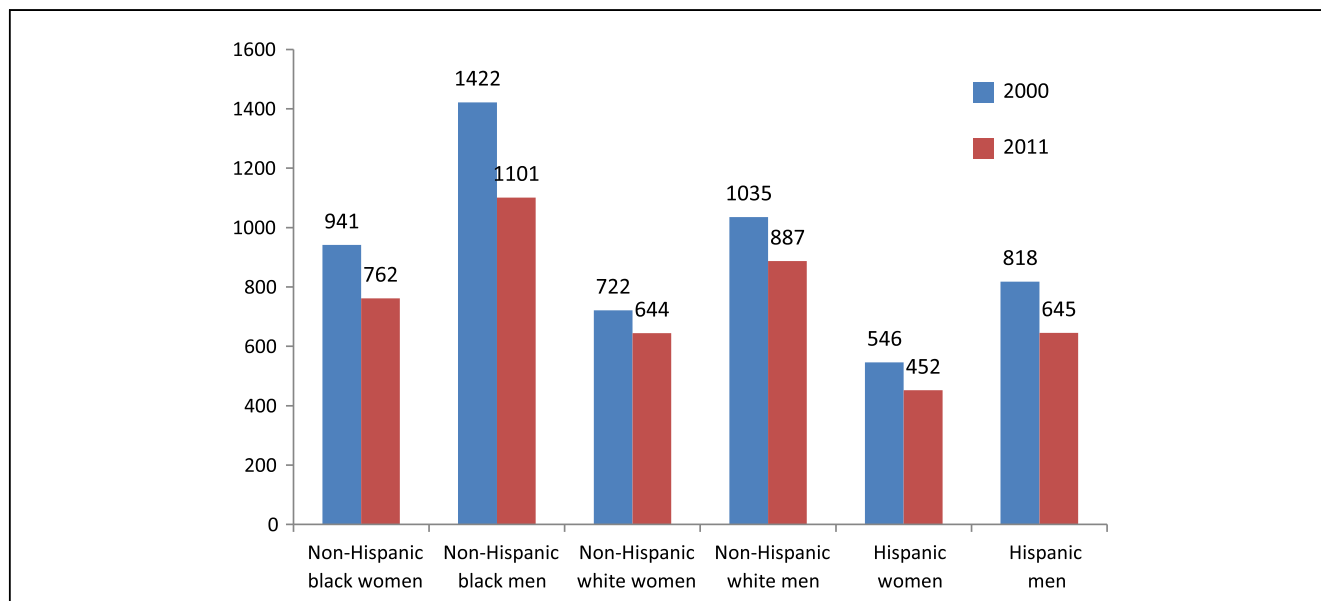
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**Figure 1** United States Age-Adjusted Death Rates per 100,000 Population, Year 2000 Versus 2011 (5,6)

issues, revolving mainly around socioeconomic conditions, cultural factors, delayed presentation for medical care, and reduced access to high-quality care.

The predominant social issue appears to be a higher prevalence of poverty, which results in poorer access to health care and less education. Higher levels of education and affluence in African Americans have translated to better understanding of disease processes, closer adherence to prescribed medical therapy, and lower rates of adverse behavior (e.g., smoking and fatty food intake) (7). Thus, when both race and education are considered, the degree of disparity is even more startling. There is a 14-year difference in life expectancy between African American men with fewer than 12 years of education compared with white men with 16 or more years of education (8).

### Is it “Their” Problem or “Ours”?

When considered from the viewpoint of either the average American household or health care workers, it is definitely “our” problem.

Large health care disparities, including premature stroke, myocardial infarction leading to heart failure, and end-stage renal disease, have always cost society in terms of productivity. But in 1986, Congress enacted the Emergency Medical Treatment and Labor Act to ensure public access to emergency services regardless of ability to pay. This obliges all Medicare-participating hospitals that offer emergency services to provide a medical screening examination when a request is made for examination or treatment for an emergency medical condition, including active labor, regardless of a patient’s ability to pay. Hospitals are then

required to provide stabilizing treatment for patients with emergency medical conditions. This was considered by many as an unfunded mandate. But hospitals increased their charges to cover the costs of charity care. Thus, the costs of this legislation are actually passed on to all consumers in the hospital setting, making it “our” problem.

In addition, when hypertension goes untreated or undertreated, African Americans develop strokes, congestive heart failure, and end-stage kidney disease at alarming rates. Accounting for only 12% of the United States population, African Americans constitute 33% of the dialysis population and are immediately fully covered by Medicare, at an estimated \$87,561 per patient annually for hemodialysis (9), fully paid by premiums and tax dollars.

As medical practitioners, we do recognize that physician biases may play a role in these disparities, as Schulman et al. (2) described, and we believe that guideline-driven appropriate care should reduce the degree of inequality. However, in the July 2 issue of the *Journal*, Subherwal et al. (10) reported an analysis of data from the ACC’s PINNACLE Registry regarding treatment of peripheral artery disease. They chronicled the self-reported use of “vasculoprotective” medications, including statins and antiplatelet therapy, in patients with peripheral artery disease and stratified the results on the basis of socioeconomic factors and physician practice site.

Although it was not surprising that the patients with the lowest socioeconomic status received less guideline-recommended medications, it was indeed unexpected to find that the major determinant of the lower prescription of guideline-recommended medications was physicians’ practice sites rather than the actual socioeconomic status of

patients. This indicates that at least some of the disparities we face occur because of the education levels of physicians, who do or do not follow the guidelines in their practices, and that such physicians tend to work in communities of lower socioeconomic strata.

Again, this makes it “our” problem.

## The Way Forward

The ACC has long recognized the contribution of health care access to these disparities, and we continue to encourage Congress to adopt payment reforms that would avoid cuts due to the flawed sustainable growth rate formula that would worsen access. We will also continue efforts to include programmatic emphasis about disparities both in online educational forums and at live programs like the ACC Annual Scientific Session, at smaller regional meetings, and through our state chapters. We will also continue to engage patients through CardioSmart and through partnerships with sister societies and community organizations working to combat this issue as well.

Some recent examples of successful partnerships aimed at reducing disparities include the ACC's partnership with the Association of Black Cardiologists on Spirit of the Heart community events, as well as the ongoing development of the Coalition to Reduce Disparities in Cardiovascular Outcomes (*credo*). The 3-day Spirit of the Heart events, the most recent of which occurred as part of ACC.13 in San Francisco, bring together local community leaders around the common goal of improving cardiovascular care in underserved communities, as well as providing free health screenings to local community groups.

Meanwhile, *credo* is designed to provide cardiologists, nurses, and other health care providers who treat or prevent cardiovascular disease with the tools to ensure optimal care for their increasingly diverse patients. In a 2011 *JACC* white paper, Yancy et al. (11) wrote that “in addition to de novo educational activities and materials *credo*...will serve as a clearinghouse for evidence-based tools and materials that can help the cardiology community better treat their diverse patient populations.” The report notes that *credo*'s efforts also extend to research and efforts to improve registry data collection around race and ethnicity (11). By developing and disseminating evidence-based educational tools, *credo* seeks to help clinicians better serve all of their patients, regardless of race, ethnicity, gender, primary language, or other factors that may influence care.

We are also delighted to hear that research into invasive cardiology disparities is being addressed by our sister organization, the Society for Cardiovascular Angiography and Interventions, which recently announced the initiation of the Health Disparities Research Consortium (<http://www.disparitiesresearch.org>), with the expressed mission to “improve the quality of life and health outcomes of women and minority patients through education, research and partnership” by specifically enrolling understudied populations into clinical trials. We invite you, as ACC members, to join us in each of these efforts. Your comments and feedback suggestions for initiatives in your practice or your community are also encouraged.

This is indeed “our” problem, after all.

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